

Intergrative Neuroscience (M.Sc.) – Study Programme

Study programme - M.Sc. Integrative Neuroscience

First semester (foundational courses)
 You must take 30 CP total: 28 CP core courses (PF) plus 2 CP of 8 CP electives (WPF). An additional 5 CP are offered optionally.

1 SEMESTER	Modul GA1 Molecular and Cellular Neuroscience 9 CP (PF) + 2 CP (WPF)	Modul GB Systems and Behavioural Neuroscience 7 CP (PF) + 2 CP (WPF)	Modul GC Theoretical and Computational Neuroscience 6 CP (PF) + 4 CP (WPF)	Modul X Professionalism/ Practical experience 6 CP (PF) + 3 CP (optional)
	Cellular Neurophysiology 301 L: 2 SWS / 3 CP 301 T (WPF): 1 SWS / 1 CP 301 P: 2 SWS / 2 CP	Integ. Compar. Neuroanatomy 303 L: 3 SWS / 3 CP 303 T (WPF): 2 SWS / 2 CP 303 P: 1 SWS / 1 CP	Theoretical Neuroscience I 105 L: 3 SWS / 3 CP 105 T (WPF): 2 SWS / 2 CP	Lab Rotation I 190 LR: 4 SWS / 6 CP
	Basic Molecular & Cell Biology 302 L: 3 SWS / 3 CP 302 T (WPF): 1 SWS / 1 CP 302 P: 1 SWS / 1 CP	Neuroethology 304 L: 2 SWS / 3 CP	Mathematical Foundations 106 L: 2 SWS / 3 CP 106 T (WPF): 2 SWS / 2 CP	Journal Club / Neurocolloquium 180/185 S (optnl.): 4 SWS / 3 CP Introduction to Matlab 107 T (optnl.): 2 SWS / 2 CP

Second semester (foundational courses continued)
 You must take 30 CP: 28 CP core courses (PF) plus 2 CP of 8 CP electives (WPF). An additional 3 CP are offered optionally.

2 SEMESTER	Modul GA2 Molecular and Cellular Neuroscience 8 CP (PF) + 4 CP (WPF)	Modul GB Systems and Behavioural Neuroscience 8 CP (PF)	Modul GC Theoretical and Computational Neuroscience 6 CP (PF) + 4 CP (WPF)	Modul X Professionalism/ Practical experience 6 CP (PF) + 2 CP (optional)
	Molecular & Cellular Neurobiology 111 L: 2 SWS / 3 CP 111 T (WPF): 2 SWS / 2 CP 111 P: 2 SWS / 2 CP	Systems Neurophysiology 113 L: 3 SWS / 3 CP 113 P: 2 SWS / 2 CP	Theoretical Neuroscience II 115 L: 3 SWS / 3 CP 115 T (WPF): 2 SWS / 2 CP	Lab Rotation II 190 LR: 4 SWS / 6 CP
	Development & Plasticity 112 L: 2 SWS / 3 CP 112 T (WPF): 2 SWS / 2 CP	Learning & Memory 114 L: 3 SWS / 3 CP	Biological Statistics 116 L: 2 SWS / 3 CP 116 T (WPF): 2 SWS / 2 CP	Journal Club 180 S (optnl.): 2 SWS / 2 CP Neurocolloquium 185 S (optnl.): 2 SWS / 1 CP

Third semester (advanced courses)
 You must take 30 CP: 24 CP of 36 CP electives (WPF) plus 6 CP core courses (PF). An additional 3 CP are offered optionally.

3 SEMESTER	Modul VA Molecular and Cellular Neuroscience 12 CP (WPF)	Modul VB Systems and Behavioural Neuroscience 12 CP (WPF)	Modul VC Theoretical and Computational Neuroscience 4 CP (WPF)	Modul VD Clinical and Applied Neuroscience 8 CP (WPF)	Modul X Professionalism 6 CP (PF) + 2 CP (optional)
	Genetic models 201L (WPF): 1 SWS / 2 CP 201P (WPF): 2 SWS / 2 CP	Cognitive Neurobiology 211L (WPF): 2 SWS / 3 CP 211P (WPF): 1 SWS / 1 CP	Spiking Networks 221L (WPF): 2 SWS / 3 CP 221P (WPF): 1 SWS / 1 CP	Clinical Neuroscience 241 (WPF): 3 SWS / 4 CP	Scientific Ethics 390 Lecture (PF): 2 SWS / 2 CP
	Neuroendocrinology/Inflammation 203L (WPF): 1 SWS / 2 CP 203P (WPF): 2 SWS / 2 CP	Microimaging 215L (WPF): 2 SWS / 3 CP 215P (WPF): 1 SWS / 1 CP	Behavioral Pharmacology 214L (WPF): 2 SWS / 3 CP 214P (WPF): 1 SWS / 1 CP	Lab Rotation III 190 Lab (PF): 3 SWS / 4 CP	Journal Club/Neurocolloquium 180 S (optnl.): 2 SWS / 2 CP 185 S (optnl.): 2 SWS / 1 CP

Fourth semester (thesis research)
 You must take 30 CP core courses (PF). An additional 3 CP are offered optionally.

4 SEMESTER	Masterarbeit 28 CP				Modul X Professionalism 30 CP (PF) + 2 CP (WF)
					Scientific Writing 300 Lecture (PF): 2 SWS / 2 CP
					Journal Club / Neurocolloquium 180 S (optnl.): 2 SWS / 2 CP 185 S (optnl.): 2 SWS / 1 CP

Legend: CP = Credits, SWS = hours per semester week, PF = core course, WPF = elective course, WF = optional subject
 L = Lecture/Vorlesung, T = Tutorial/Übung, P = Laboratory/Laborpraktikum, S = Seminar, LR = Laboratory rotation/Spezialpraktikum